# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

Southside Chattanooga Lead - Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region IV

Subject: POLREP #16

**Residential Soil Removal Continues** 

Southside Chattanooga Lead

Chattanooga, TN

Latitude: 35.0333793 Longitude: -85.3057271

To: Jim Mc Guire, ERRB Reg 4

From: Perry Gaughan, On Scene Coordinator

**Date:** 5/22/2013

Reporting Period: May 6th through May 18th 2013

## 1. Introduction

#### 1.1 Background

Site Number: B4J4 Contract Number:

D.O. Number: Action Memo Date: 8/19/2012

Response Authority: CERCLA Response Type: Time-Critical

Response Lead: EPA Incident Category: Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 9/17/2012 Start Date: 9/24/2012

Demob Date: Completion Date:

CERCLIS ID: RCRIS ID:

ERNS No.: State Notification:

FPN#: Reimbursable Account #:

### 1.1.1 Incident Category

Lead contaminated soil on 52 properties being removed as a time critical removal under CERCLA.

## 1.1.2 Site Description

The Tennessee Department of Environmental Conservation (TDEC) requested the EPA Region 4 Emergency Response and Removal Branch's (ERRB's) assistance after discovering that the lawns of one residence and potentially several more were contaminated with lead along Read Avenue near downtown Chattanooga. Initially, one resident along Read Avenue presented to the emergency room with severe fatigue and abdominal pain. Emergency room blood work indicated lead levels approaching 20 micrograms per deciliter (ug/dl) which alerted TDEC to conduct follow up assessments. TDEC requested assistance from ERRB to characterize the soil around the home and an initial assessment was conducted with SESD (Science and Ecosystem Support Division) Athens in which three homes were assessed as well as a public park and playground area at 1700 Mitchell Avenue. Ten samples were collected and two samples showed elevated lead levels exceeding 400 ppm.

#### 1.1.2.1 Location

The Southside Chattanooga Lead Site is located along Read, Mitchell and Carr Avenues south of Main Street in Chattanooga, Hamilton County, Tennessee (Latitude: 35.0456, Longitude: -85.3097). The area is a blend of young, middle income couples who are renovating older constructed homes and low to middle income retired couples who have resided in the area for 20 plus years. The vast majority of homes were built in the early 1900's.

The Southside Chattanooga area is immediately adjacent to downtown Chattanooga and was prone to flooding during the early 1900's and prior to the development of damming and flood control measures by the Tennessee Valley Authority (TVA). Several of the homes along Read and Mitchell Avenues appear to have been built on 4-5 feet of clay fill.

### 1.1.2.2 Description of Threat

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In response to a request from TDEC, the EPA Region 4 ERRB with assistance from SESD Athens, conducted two follow up assessments of the Read and Mitchell Avenue area in January and April 2012. Of the 81 homes (162 front and back yards) assessed near downtown Chattanooga, 68 lawns (42 %) have lead levels exceeding 400 ppm. Lead levels range from 400 – 4000 ppm. The 4000 ppm sample was collected from a lawn along the 1600 block of Read Ave and the sample contained very dark fine material, most likely a high concentration of bag-house dust.

In addition, the Battle Academy Elementary School which neighbors the site was sampled in mid June 2012. A 20' by 20' grid was laid over the school property and 140 grids were screened using X-ray fluorescence spectroscopy (XRF). No significant lead contamination was found and all lead levels were below 55 ppm.

#### 2. Current Activities

#### 2.1 Operations Section

## 2.1.1 Narrative

#### May 6th through May 11th 2013

On Monday, May 6<sup>th</sup>, removal operations were cancelled because of heavy rainfall.

On Tuesday May 7<sup>th</sup>, the ERRs crew checked soil tarps in the staging area but work was limited because of task order issues.

On Wednesday, May 8th, began work by removing the fencing and overgrowth at the property line of 1707 and 1705 Mitchell Avenue. Some small trees and shrubs were removed in this area that were overgrown within the fence and were inhibiting access to the front yards. The crew removed the shrubs that the home owner wished to save and removed a section of iron fence in the front yard of 1707 Mitchell Avenue. In addition, the crew began removing contaminated soil from the front yard of 1707 Mitchell Avenue and the adjacent front yard of 1705 Mitchell Avenue. The crew also removed some contaminated material from the back yard of 1705 Mitchell. START collected composite soil samples from both front yards. The samples will be submitted for lead and arsenic analysis at a later date.

On Thursday, May 9th, the ERRs crew began backfilling the areas where material was removed. A layer of clay fill and a layer of topsoil was placed, graded, compacted and covered with sod. Plants previously removed were placed back in the ground.

On Friday, May 10<sup>th</sup>, the crew began removing contaminated material from the back yard of 1707 Mitchell. The crew also utilized rakes, hoes, and shovels to remove material from underneath the deck at this property. Most areas were removed to clay. Due to this location being very difficult for the crew to obtain (had to crawl under deck to remove material); the area was lined with poly sheet, and covered with clay backfill. Remaining areas in the back yard were covered with clay backfill and then covered

with a layer of topsoil. The crew placed sod over the compacted topsoil and watered the sod. The crew also placed a crush-n-run driveway in the back yard of 1707 Mitchell per request of the property owner.

## May 13th through May 18th 2013

START contractors continue to assist with technical support, daily operations, post-excavation confirmation sampling using X-ray fluorescence spectroscopy (Xrf) and air sampling during excavation and staging of contaminated soils.

The OSC continues to coordinate clean up efforts and assessments with Tenn Dept of Environmental Conservation (TDEC) and Tenn Dept of Health as well as Hamilton County health officials. TDEC and the OSC plan to update Chattanooga City Council during February 2013. A specific date has not been set by City Council.

The OSC, Tenn Dept of Health and Tenn Dept of Environmental Conservation (TDEC) are currently preparing an assessment strategy for Chattanooga City Council addressing future lead assessments in the downtown area.

## 2.1.2 Response Actions to Date

# 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

## 2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

# 2.2 Planning Section

No information available at this time.

# 2.3 Logistics Section

No information available at this time.

## 2.4 Finance Section

# **Estimated Costs \***

	Budgeted	Total To Date	Remaining	% Remaining				
Extramural Costs								
ERRS - Cleanup Contractor	\$1,850,000.00	\$1,675,000.00	\$175,000.00	9.46%				
TAT/START	\$100,000.00	\$65,000.00	\$35,000.00	35.00%				
Intramural Costs								
Total Site Costs	\$1,950,000.00	\$1,740,000.00	\$210,000.00	10.77%				

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

#### 2.5 Other Command Staff

No information available at this time.

## 3. Participating Entities

## 3.1 Unified Command

## 3.2 Cooperating Agencies

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#### 4. Personnel On Site

No information available at this time.

### 5. Definition of Terms

No information available at this time.

#### 6. Additional sources of information

No information available at this time.

#### 7. Situational Reference Materials

No information available at this time.